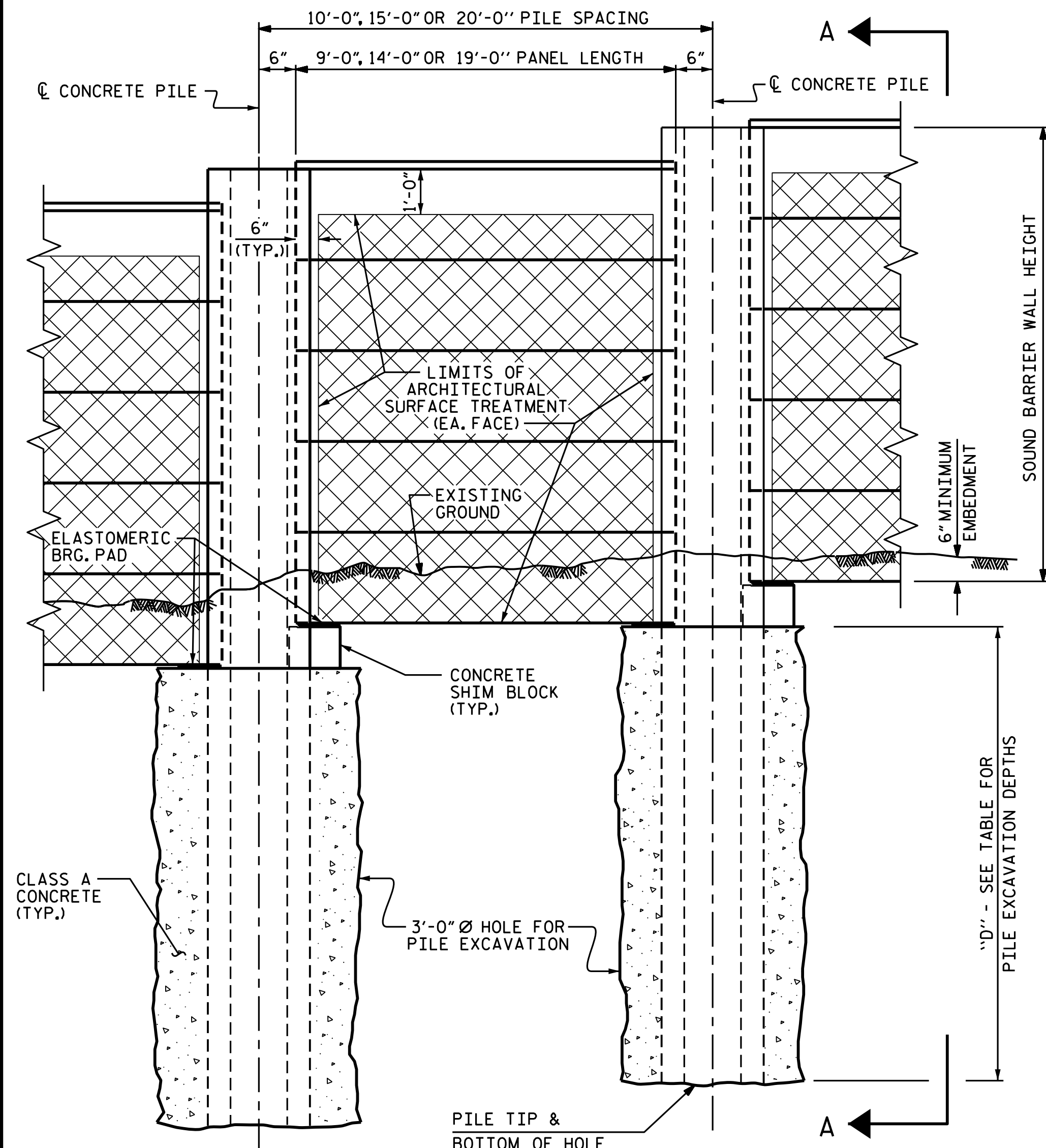


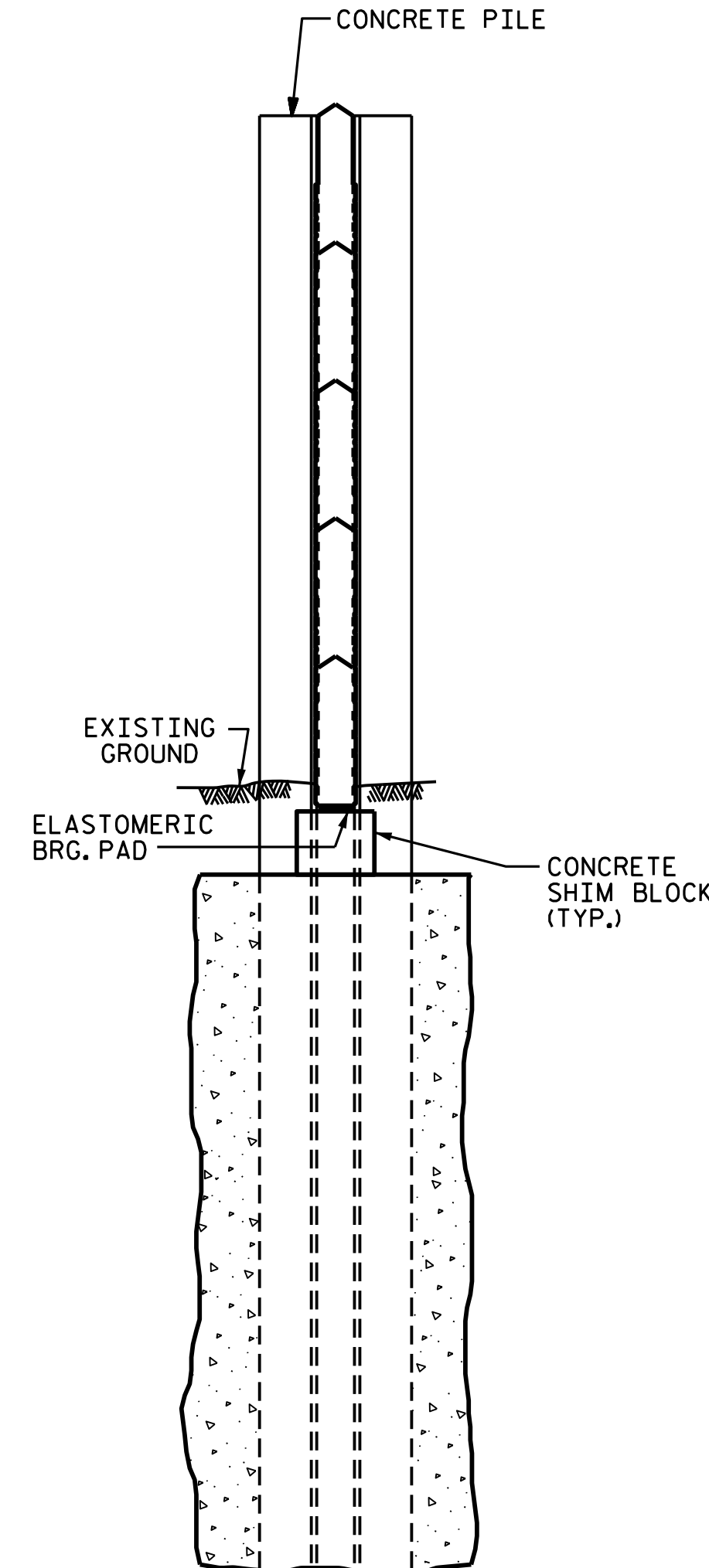
**NOTES**

- FOR SOUND BARRIER WALL, SEE GEOTECHNICAL SPECIAL PROVISIONS.
- CONSTRUCT SOUND BARRIER WALL TO LINES AND GRADES SHOWN ON THE ROADWAY PLANS.
- PROVIDE PANELS WITH A FLAT BOTTOM.
- VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING HOLES TO ENSURE SUFFICIENT CLEARANCE IS AVAILABLE.
- ADJUST PILE EXCAVATION ELEVATIONS TO MAINTAIN 6" MINIMUM EMBEDMENT OF THE BOTTOM PANEL.
- USE CLASS AA FOR PANELS AND CLASS A CONCRETE PILE EXCAVATION BACKFILL, IN ACCORDANCE WITH ARTICLE 1000-4 OF THE STANDARD SPECIFICATIONS.
- AT THE CONTRACTOR'S OPTION, USE 10'-0", 15'-0", OR 20'-0" PILE SPACINGS. STANDARD PRECAST CONCRETE PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING. FOR 20'-0" PILE SPACING, PANELS DESIGNED AND MANUFACTURED BY A THIRD PARTY VENDOR SHALL BE USED.
- FOR SOUND BARRIER WALL STATIONS, OFFSETS, AND WALL ENVELOPE, SEE ROADWAY PLANS.
- PLACE 1" Ø BACKER RODS FULL HEIGHT ON EACH SIDE OF THE PRECAST PANELS. SET AND SEAL THE BACKER ROD IN PLACE WITH SEALANT THAT CONFORMS WITH ARTICLE 1028-3 OF THE STANDARD SPECIFICATIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- PILE EXCAVATION DEPTHS ARE BASED ON 36-INCH DIAMETER HOLES. FOR 30-INCH DIAMETER HOLES, ADD 1 FOOT TO THE PILE EXCAVATION DEPTHS SHOWN.
- SOUND BARRIER WALL 1 PILE LOCATIONS SHALL BE SLEEVED DURING CONSTRUCTION OF MSE RETAINING WALL 1. SLEEVES FOR SOUND BARRIER WALL FOUNDATIONS SHALL BE CONSIDERED INCIDENTAL TO MSE RETAINING WALL 1. SEE MSE WALL PLANS AND GEOTECHNICAL SPECIAL PROVISIONS.

PILE EXCAVATION DEPTHS "D"					
WALL #1		FROM : STA. 10+00.00 -NW1- TO : STA. 22+21.00 -NW1-			
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT			
		H ≤ 15'	15' < H ≤ 20'	20' < H ≤ 25'	
		10'-0"	10'-0"	12'-0"	13'-0"
		15'-0"	11'-0"	13'-0"	16'-0"
WALL #1		FROM : STA. 22+21.00 -NW1- TO : STA. 28+30.00 -NW1-			
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT			
		H ≤ 15'	15' < H ≤ 20'	20' < H ≤ 25'	
		10'-0"	9'-0"	11'-0"	12'-0"
		15'-0"	10'-0"	12'-0"	14'-0"
		20'-0"			
		11'-0"			
		13'-0"			
		16'-0"			

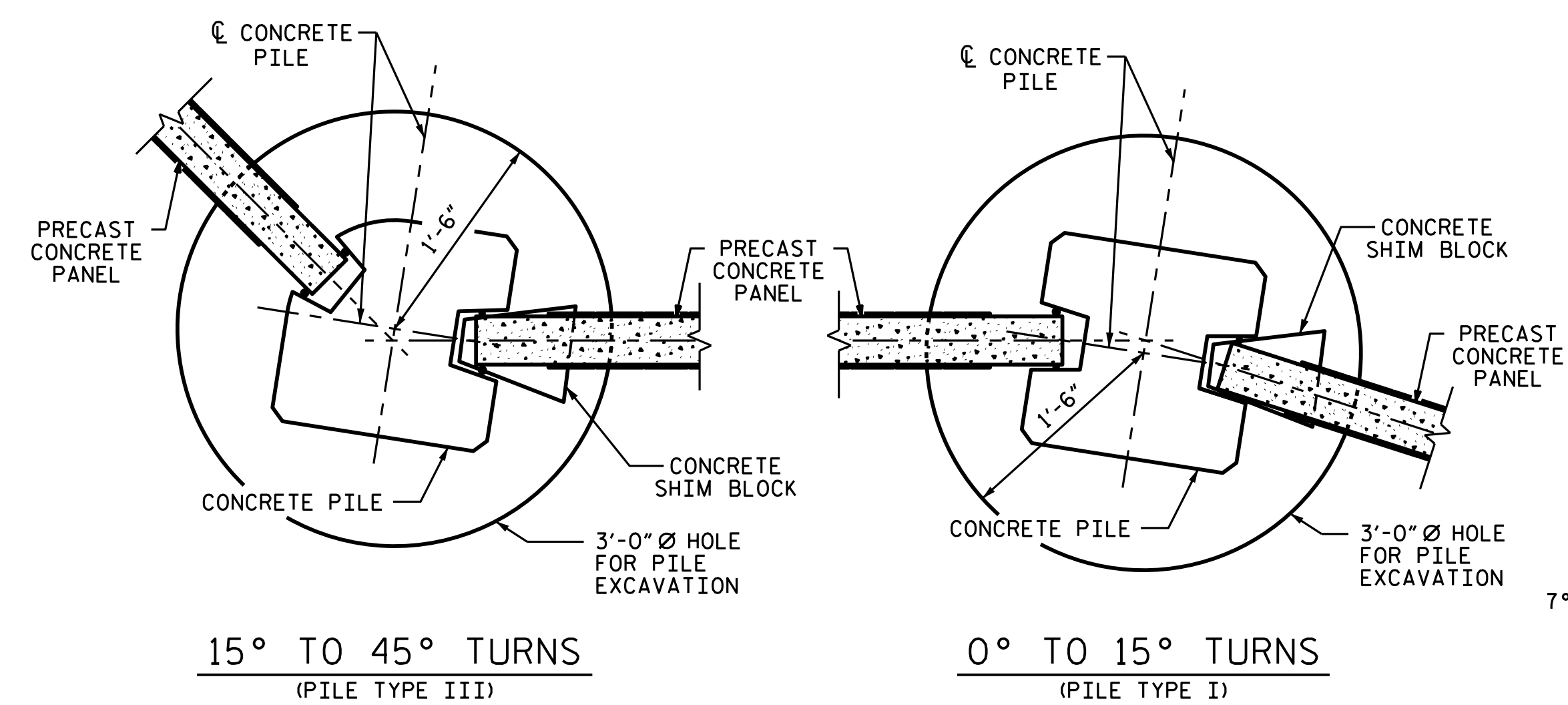


**ELEVATION**

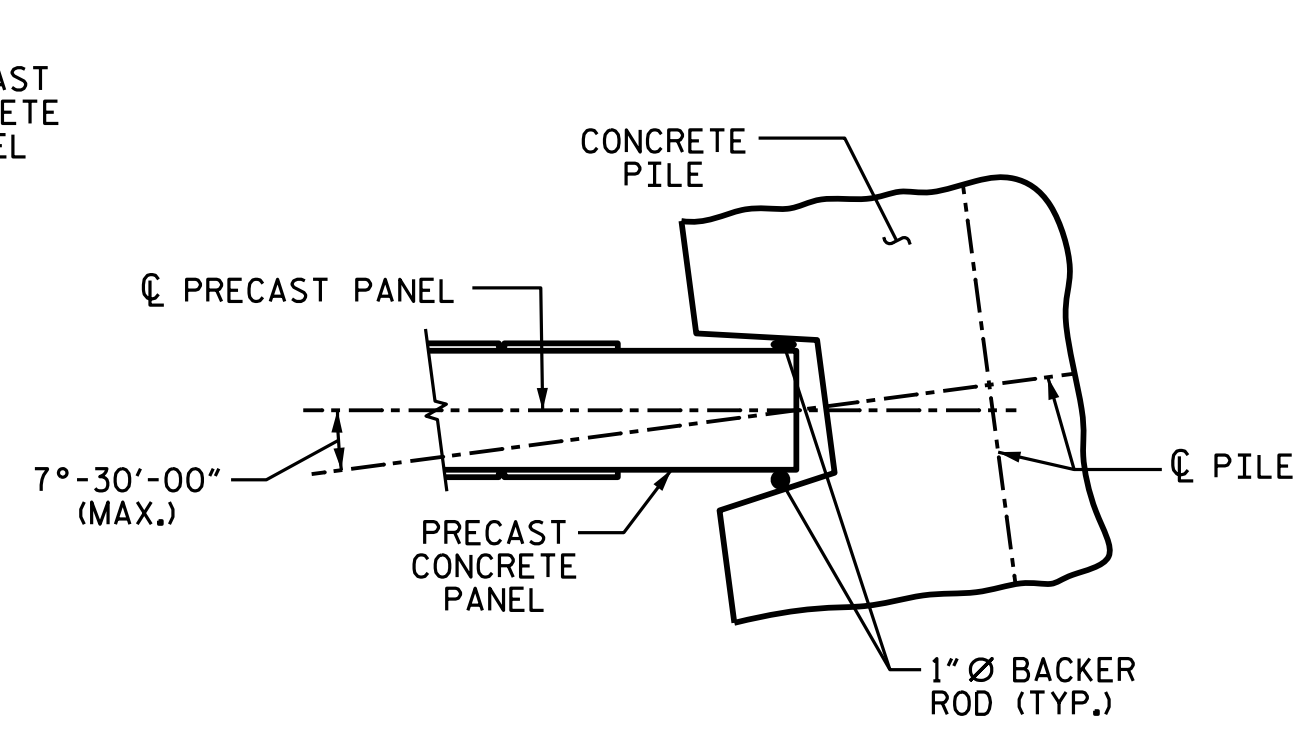


**SECTION A-A**

PILE REINFORCING STEEL DESIGN WIND PRESSURE = 40 PSF							
PILE TYPE I				PILE TYPE III			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
10'-0"	H ≤ 25'	4 - #8 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	15'-0"	H ≤ 20'	#3 @ 1'-4"CTS.		15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE
15'-0"	20' < H ≤ 25'	4 - #10 EA. FACE	#3 @ 1'-4"CTS.	15'-0"		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE
	20'-0"	H ≤ 20'	4 - #9 EA. FACE		#3 @ 1'-4"CTS.	20'-0"	H ≤ 20'
20' < H ≤ 25'		4 - #11 EA. FACE	#3 @ 1'-4"CTS.				
PILE TYPE II				PILE TYPE III ALT.			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
10'-0"	H ≤ 25'	4 - #6 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	15'-0"	H ≤ 20'	#3 @ 1'-4"CTS.		15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE
15'-0"	20' < H ≤ 25'	4 - #7 EA. FACE	#3 @ 1'-4"CTS.	15'-0"		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE
	20'-0"	H ≤ 20'	4 - #6 EA. FACE		#3 @ 1'-4"CTS.	20'-0"	H ≤ 20'
20' < H ≤ 25'		4 - #8 EA. FACE	#3 @ 1'-4"CTS.				



**TYPICAL WALL TURN DETAILS**



**PILE ROTATION LIMIT FOR WALL TURN**

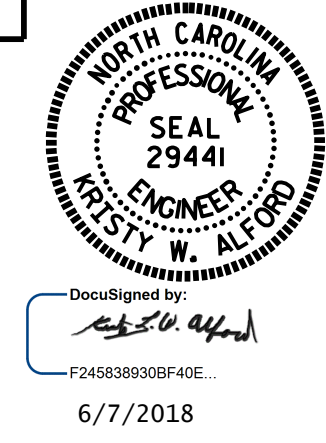
BILL OF MATERIAL	
SOUND BARRIER WALL	27855 S.F.
ARCHITECTURAL SURFACE TREATMENT	45110 S.F.
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	ASHLAR STONE
STAIN OPTION:	FS 36270

PROJECT NO. U-4405  
CUMBERLAND COUNTY  
 STATION: 10+00.00 -NW1-

SHEET 1 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

STANDARD  
 SOUND BARRIER WALL



ASSEMBLED BY : K.W. ALFORD	DATE : 6/18
CHECKED BY : G.W. DICKEY	DATE : 6/18
DRAWN BY : MAA 6/11	REV. 9/26/14 MAA/TMG
CHECKED BY : GM 6/11	REV. 10/17 MAA/THC
	REV. 5/18 MAA/THC

REVISIONS						SHEET NO. SBW-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 3
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED